

### REMARKS

This Amendment responds to the Office Action dated December 12, 2006 in which the Examiner rejected claims 1-3 under 35 U.S.C. §102(e) and rejected claims 4-7 under 35 U.S.C. §103.

As indicated above, a typographical error in the specification has been corrected. Applicants respectfully request the Examiner approve the correction.

As indicated above, claims 1-5 have been amended in order to make explicit what is implicit in the claims. The amendments are unrelated to a statutory requirement for patentability.

Claims 1-3 were rejected under 35 U.S.C. §102(e) as being anticipated by *Furukawa et al.* (U.S. Publication 2005/0094870).

*Furukawa et al.* appears to disclose [0032] FIG. 1 is a block diagram showing the construction of a video encoding apparatus in one embodiment. As shown therein, an input video signal 100 is a video signal reproduced by a video recording/reproducing apparatus such as a digital VTR or a DVD system capable of repeatedly reproducing the same signal. The signal 100 is inputted into an encoder section 10. In this embodiment, the encoder section 10 is the same in construction as a video encoding apparatus based on the MPEG scheme. [0033] In the encoder section 10, a video signal of a to-be-encoded frame selected from the input video signal 100 is first stored in a frame memory 11. [0040] In this embodiment, the same video file, i.e., the input video signal of the same content such as a movie is encoded twice according to the above-stated basic operation. Further, in this embodiment, a video feature calculator 31, an encoded parameter generator 32, a number-of-encoded-bit determination section 33 and an encoded parameter corrector 34 are

provided. During the first encoding, video feature amounts are calculated and encoded parameters are set based on the video feature amounts thus calculated. During the second encoding, the number of generated encoded bits of the encoded bit stream 111 is determined and encoded parameters are corrected based on the number of generated encoded bits.

Thus, *Furukawa et al.* merely discloses a first frame encoding based upon a user input size and the input video signal [0041] and a second encoding based upon a difference between the number of generated bits and a target number of bits designated by user exceeding a threshold [0046]. Nothing in *Furukawa et al.* shows, teaches or suggests variably setting a frame rate and bit rate according to a) an input type of contents of the image and predetermined conditions as claimed in claim 1, b) size of the image which is based upon input data and predetermined conditions as claimed in claim 2, and c) a resolution of an image which is based upon input data and predetermined conditions as claimed in claim 3. Rather, *Furukawa et al.* merely discloses a first encoding based upon user input size and the input video signal and a second correction encoding based upon a difference between the number of generated bits and an user input target number of bits.

In other words, *Furukawa et al.* merely discloses a user inputting a size designation and a target number of bits. Nothing in *Furukawa et al.* shows, teaches or suggests an input type of contents of an image as claimed in claim 1. Furthermore, nothing in *Furukawa et al.* shows, teaches or suggests setting frame and bit rates based upon the input type of content and predetermined conditions as claimed in claim 1. Also, nothing in *Furukawa et al.* shows, teaches or suggests that a size of the an image is based upon input data and predetermined conditions as

claimed in claim 2 or that a resolution of an image is based on input data and predetermined conditions as claimed in claim 3.

Since nothing in *Furukawa et al.* shows, teaches or suggests a) variably setting a frame rate and bit rate as claimed in claims 1-3, b) setting rates based upon an input type of contents of the image and a predetermined condition as claimed in claim 1, c) setting rates according to size of an image based on input data and predetermined conditions as claimed in claim 2 and d) setting rates according to a resolution of an image based on input data and predetermined conditions as claimed in claim 3, Applicants respectfully request the Examiner withdraws the rejection to claims 1-3 under 35 U.S.C. §102(e).

Claims 4-7 were rejected under 35 U.S.C. §103 as being unpatentable over *Furukawa et al.* in view of *Nago et al.* (U.S. Patent 6,567,117).

As discussed above, nothing in *Furukawa et al.* shows, teaches or suggests a) variable setting a frame rate or an image quality. Furthermore, nothing in *Furukawa et al.* shows, teaches or suggests setting the rates based upon an input image content type and based upon being within a predetermined range of the frame rate or a predetermined range of image quality of the frame as claimed in claim 4.

Also, *Furukawa et al.* merely discloses first encoding based upon input image size and the input image signal. Nothing in *Furukawa et al.* shows, teaches or suggests a database which previously stores optimal ranges according to content type, size and resolution of an image or selecting a frame rate and bit range for an input selected image content and selecting the image size and image resolution based upon contents of the database as claimed in claim 5.

*Nago et al.* appears to disclose a method of regulation of a total image quality in a coded picture which realizes the total image quality regulation through a single operation without requiring an independent operation of an image format and a frame rate. (Column 2, lines 41-45). Characteristic information which defines an applicable range of coding bit rates and coding frame rates for each image format is previously stored as parameter conversion data in a storage 13. A parameter input section 11 includes a display which is capable of displaying a user interface screen, for example, and a keyboard and/or mouse which set up an input on the user interface screen. An operator enters an image quality regulating parameter  $P_q$  through the parameter input section 11 (step S1), determines a coding frame rate  $R_f$  and an image format  $F_i$  by reference to parameter conversion data stored in the storage 13, in the image quality regulating section 12, using the inputted image quality regulating parameter as a key (step S2), and applies them to a picture coding processor 14 to encode an input image data signal  $D_p$  in accordance with the image format  $F_i$  and the coding frame rate  $R_f$  thus determined and delivers the coded image signal  $C_p$  (step S3). (Column 4, lines 26-42). As shown in FIG. 7, a user may utilize a change button D23 on a user interface screen D20 to choose one of items, "image quality", to be selected in setting up the image quality, to specify whether "quality oriented" or "motion oriented" is desired, whereby both the image format and the picture quality can be regulated. (Column 4, line 66 to column 5, line 5).

Thus, *Nago et al.* merely discloses entering an image quality regulating parameter such as quality oriented or motion oriented and determining the coding frame rate and image format with reference to a parameter conversion data stored in storage. Nothing in *Nago et al.* shows, teaches or suggests inputting an image

content type as claimed in claims 4 and 5, and resetting the frame rate and image quality based upon the input image content type as claimed in claim 4. Furthermore, nothing in *Nago et al.* shows, teaches or suggests selecting frame rate and bit rate for an input selected image content type and selecting image size and image resolution based upon contents of a database as claimed in claim 5. Rather, *Nago et al.* merely discloses an image quality regulating parameter such as quality oriented or motion oriented.

The combination of *Furukawa et al.* and *Nago et al.* would merely suggest to replace the user input size and target number of bits with the image quality parameter of *Nago et al.* Thus, nothing in the combination of the references shows, teaches or suggests a) variably setting a frame rate or image quality of a frame/bit rate based upon an input selected image content type as claimed in claims 4 and 5 or b) a setting unit which sets image size, image resolution based upon the contents of a database as claimed in claim 5. Therefore, Applicants respectfully request the Examiner withdraws the rejection to claims 4 and 5 under 35 U.S.C. §103.

Claims 6-7 depend from claim 5 and recite additional features. Applicants respectfully submit that claims 6 and 7 would not have been obvious over *Furukawa et al.* and *Nago et al.* at least for the reasons as set forth above. Therefore, Applicants respectfully request the Examiner withdraws the rejection to claims 6-7 under 35 U.S.C. §103.

Claim 8 was rejected under 35 U.S.C. §103 as being unpatentable over *Furukawa et al.* and *Nago et al.* and further in view of *Lane et al.* (U.S. Patent 5,377,051).

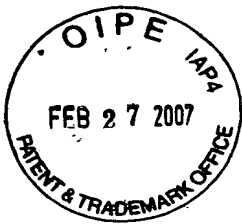
Applicants respectfully traverse the Examiner's rejection of the claim under 35 U.S.C. §103. The claim has been reviewed in light of the Office Action, and for reasons which will be set forth below, Applicants respectfully request the Examiner withdraws the rejection to the claims and allows the claims to issue.

As discussed above, since nothing in the primary references to *Furukawa et al.* and *Nago et al.* show, teach or suggest the primary features as claimed in claim 5, Applicants respectfully submit that the combination of the primary references with the secondary reference to *Lane et al.* would not overcome the deficiencies of the primary references. Therefore, Applicants respectfully request the Examiner withdraws the rejection to claim 8 under 35 U.S.C. §103.

Thus it now appears that the application is in condition for reconsideration and allowance. Reconsideration and allowance at an early date are respectfully requested.

If for any reason the Examiner feels that the application is not now in condition for allowance, the Examiner is requested to contact, by telephone, the Applicants' undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this case.

In the event that this paper is not timely filed within the currently set shortened statutory period, Applicants respectfully petition for an appropriate extension of time. The fees for such extension of time may be charged to Deposit Account No. 02-4800.



In the event that any additional fees are due with this paper, please charge  
our Deposit Account No. 02-4800.

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

Date: February 27, 2007

By:

A handwritten signature in black ink, appearing to read "Ellen Marcie Emas".

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